NPDES Permit No. IL0021849

Notice No. GY:11111601.bah

Public Notice Beginning Date: **September 12, 2015**

Public Notice Ending Date: **October 13, 2015**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

Village of Bensenville
12 South Center Street
Bensenville, Illinois 60106

Name and Address of Facility:

Village of Bensenville - South STP
711 East Jefferson Street
Bensenville, Illinois 60106
(DuPage County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Getie Yilma at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic and industrial wastewater for the Village of Bensenville.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, Addison Creek is 0 cfs.

The existing design average flow (DAF) for the facility is 4.7 million gallons per day (MGD) and the design maximum flow (DMF) for the existing facility is 10 MGD. Treatment consists of screening, grit removal, primary treatment trickling filtration, activated sludge, sedimentation, sand filtration, chlorination/dechlorination, excess flow treatment, aerobic sludge digestion and land application of sludge.

The design average flow (DAF) for the proposed facility is 4.7 million gallons per day (MGD) and the design maximum flow (DMF) for the proposed facility is 12 MGD. Treatment consists of screening, grit removal, activated sludge, sedimentation, sand filtration, chlorination/dechlorination, excess flow treatment, aerobic sludge digestion and land application of sludge.

This treatment works has an approved pretreatment program. There are 3 CIUs.

This Reissued Permit does not increase the facility's DAF, concentration limits, and/or load limits.

This Reissued Permit increases the facility's DMF.

Application is made for the existing discharge(s) which is (are) located in DuPage County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Addison Creek	41° 56′ 54″ North	87° 55′ 30″ West	General Use	Not Rated
002	Willow Creek	41° 58′ 44″ North	87° 56′ 38″ West	General Use	Not Rated
003	Addison Creek	41° 56′ 54″ North	87° 55′ 48″ West	General Use	Not Rated

To assist you further in identifying the location of the discharge(s) please see the attached map.

The stream segment(s) receiving (Waterbody Segment GLA-04) the discharge from outfall(s) 001 is (are) on the 303(d) list of impaired waters.

The following parameters have been identified as the pollutants causing impairment:

Potential Causes	Uses Impaired
alpha-BHC, alteration of stream-side vegetative cover (non-pollutant), copper, hexachlorobenzene, oil and grease, other flow regime alterations(non-pollutant), dissolved oxygen, polychlorinated biphenyls, total suspended solids, total phosphorus, sedimentation/siltation and visible oil	Aquatic life
Aquatic algae (non-pollutant) and bottom deposits	Aesthetic quality

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall (Existing Plant)

Load limits computed based on a design average flow (DAF) of 4.7 MGD (design maximum flow (DMF) of 10 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Regulation
CBOD5**	392 (834)		784 (1,668)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	470 (1,001)		941 (2,002)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: March.	71 (150)	176 (375)	259 (550)	1.8	4.5	6.6	35 IAC 355 and 35 IAC 302
April-May/Sept.-Oct	59 (125)	176 (375)	278 (592)	1.5	4.5	7.1	
June-August	59 (125)	153 (325)	365 (776)	1.5	3.9	9.3	
Nov.-Feb	129 (275)		235 (500)	3.3		6.0	
Total Phosphorus (as P)***	39 (83)			1.0			35 IAC 304.124
Chloride	Monitor Only						35 IAC 309.146
Dissolved Phosphorus	Monitor Only						35 IAC 309.146
Total Nitrogen	Monitor Only						35 IAC 309.146
Nitrate/Nitrite	Monitor Only						35 IAC 309.146
Total Kjeldahl Nitrogen (TKN)	Monitor Only						35 IAC 309.146
Alkalinity	Monitor Only						35 IAC 309.146
Temperature	Monitor Only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

**BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105.

***A compliance schedule to provide the facility additional time to comply with the phosphorus limit has been included in this draft permit.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall (Proposed Plant)

Load limits computed based on a design average flow (DAF) of 4.7 MGD (design maximum flow (DMF) of 12 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Regulation
$CBOD_5$**	392 (1,001)		784 (2,002)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	470 (1,201)		941 (2,402)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: March	71 (180)	176 (450)	259 (661)	1.8	4.5	6.6	35 IAC 355 and 35 IAC 302
April-May/Sept.-Oct	59 (150)	176 (450)	278 (711)	1.5	4.5	7.1	
June-August	59 (150)	153 (390)	365 (931)	1.5	3.9	9.3	
Nov.-Feb.	129 (330)		235 (600)	3.3		6.0	
Total Phosphorus (as P) ***	39 (100)			1.0			35 IAC 304.123
Chloride	Monitor Only						35 IAC 309.146
Dissolved Phosphorus	Monitor Only						35 IAC 309.146
Total Nitrogen	Monitor Only						35 IAC 309.146
Nitrate/Nitrite	Monitor Only						35 IAC 309.146
Total Kjeldahl Nitrogen (TKN)	Monitor Only						35 IAC 309.146
Alkalinity	Monitor Only						35 IAC 309.146
Temperature	Monitor Only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).
**BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105.
***A compliance schedule to provide the facility additional time to comply with the phosphorus limit has been included in this draft permit.

This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): 002 North STP Excess Flow Outfall (for flows in excess of 1,100 gpm and not exceeding 1,442 gpm)

	CONCENTRATION LIMITS (mg/L)		
Parameter	Monthly Average	Weekly Average	Regulation
$CBOD_5$*	30	45	40 CFR 133.102
Suspended Solids*	30	45	40 CFR 133.102
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL		35 IAC 304.121
pH	Shall be in the range of 6 to 9 Standard Units		35 IAC 304.125
Chlorine Residual	0.75		35 IAC 304.208
Total Phosphorus (as P)	Monitor Only		35 IAC 309.146
Ammonia Nitrogen (N)	Monitor Only		35 IAC 309.146
Dissolved Oxygen	Monitor Only		35 IAC 309.146

*The 30-day average percent removal shall not be less than 85 percent.

This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): 003 Excess Flow Outfall (existing plant flows in excess of 6,944 gpm and proposed flows in excess of 8,333 gpm)

	CONCENTRATION LIMITS (mg/L)		
Parameter	Monthly Average	Weekly Average	Regulation
CBOD5**	30	45	40 CFR 133.102
Suspended Solids**	30	45	40 CFR 133.102
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL		35 IAC 304.121
pH	Shall be in the range of 6 to 9 Standard Units		35 IAC 304.125
Chlorine Residual	0.75		35 IAC 304.208
Total Phosphorus (as P)	Monitor Only		35 IAC 309.146
Ammonia Nitrogen (N)	Monitor Only		35 IAC 309.146
Dissolved Oxygen	Monitor Only		35 IAC 309.146

*The 30-day average percent removal shall not be less than 85 percent.

This draft Permit also contains the following requirements as special conditions:

1. Reopening of this Permit to include different final effluent limitations.

2. Operation of the facility by or under the supervision of a certified operator.

3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.

4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

5. Prohibition against causing or contributing to violations of water quality standards.

6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.

7. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

8. Effluent sampling point location.

9. Controlling the sources of infiltration and inflow into the sewer system.

10. Seasonal fecal coliform limits.

11. The Permittee implements and administers an industrial pretreatment program pursuant to 40 CFR §403.

12. Submission of annual fiscal data.

13. A requirement for biomonitoring of the effluent.

14. Submission of semi annual reports indicating the quantities of sludge generated and disposed.

15. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.

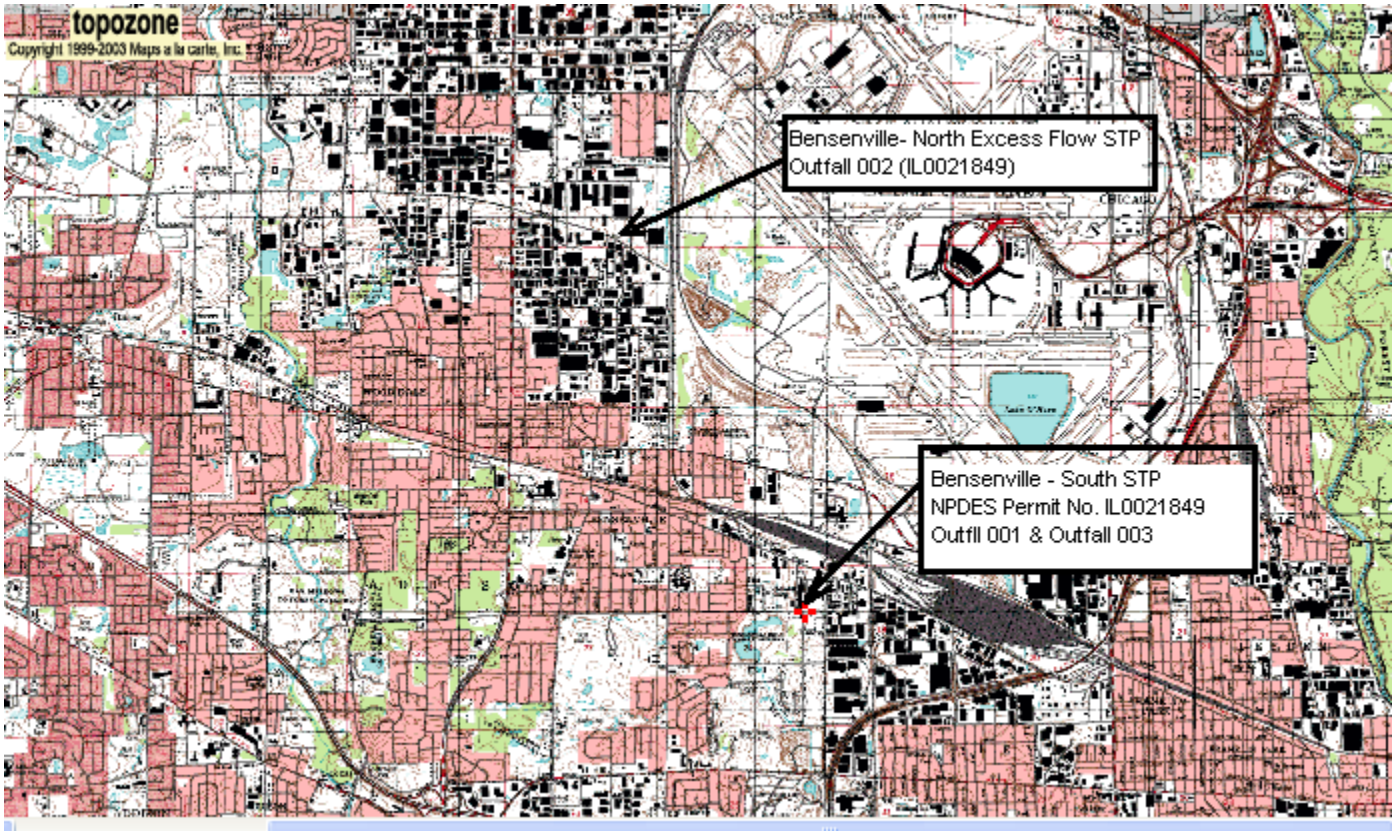
16. DuPage River/Salt Creek requirements.

17. Capacity, Management, Operations and Maintenance (CMOM) requirements.

18. For Discharge Nos. 002 and 003, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.75 mg/L (monthly average) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMRs on a monthly basis.

19. Reasonable potential analysis and mixing study plan.

20. Compliance schedule for meeting phosphorus limits.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Bensenville- North Excess Flow STP
Outfall 002 (IL0021849)
Bensenville - South STP
NPDES Permit No. IL0021849
Outfll 001 & Outfall 003

NPDES Permit No. IL0021849

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

Village of Bensenville
12 South Center Street
Bensenville, Illinois 60106

Facility Name and Address:

Village of Bensenville - South STP
711 East Jefferson Street
Bensenville, Illinois 60106
(DuPage County)

Receiving Waters: Addison Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the Effluent Limitation, Monitoring, and Reporting requirements; Special Conditions and Attachment H Standard Conditions attached herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

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NPDES Permit No. IL0021849

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (Existing Plant)

Load limits computed based on a design average flow (DAF) of 4.7 MGD (design maximum flow (DMF) of 10 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$**[1]	392 (834)		784 (1,668)	10		20	2 Days/Week	Composite
Suspended Solids[1]	470 (1,001)		941 (2,002)	12		24	2 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						2 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						2 Days/Week	Grab
Chlorine Residual***						0.05	2 Days/Week	Grab
Ammonia Nitrogen: As (N) March	71 (150)	176 (375)	259 (550)	1.8	4.5	6.6	2 Days/Week	Composite
April-May/Sept.-Oct.	59 (125)	176 (375)	278 (592)	1.5	4.5	7.1	2 Days/Week	Composite
June-August	59 (125)	153 (325)	365 (776)	1.5	3.9	9.3	2 Days/Week	Composite
Nov.-Feb.	129 (275)		235 (500)	3.3		6.0	2 Days/Week	Composite
Total Phosphorus(as P)[2]	39 (83)			1.0			2 Days/Week	Composite
Chloride	Monitor Only						1 Day/Month	Composite
Dissolved Phosphorus	Monitor Only						1 Day/Month	Composite
Total Nitrogen	Monitor Only						1 Day/Month	Composite
Nitrate/Nitrite	Monitor Only						1 Day/Month	Composite
Total Kjeldahl Nitrogen (TKN)	Monitor Only						1 Day/Month	Composite
Alkalinity	Monitor Only						1 Day/Month	Grab
Temperature	Monitor Only						1 Day/Month	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	2 Days/Week	Grab
August-February				5.5	4.0	3.5	2 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
***See Special Condition 10.

(Continued on Next Page)

NPDES Permit No. IL0021849

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (Existing Plant) (Continued)

[1]BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA or U.S. EPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD5 concentration to determine the effluent BOD_5 concentration. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

[2]See Special Conditions 16 and 20.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.
Fecal Coliform shall be reported on the DMR as a daily maximum value.
pH shall be reported on the DMR as minimum and maximum value.
Chlorine Residual shall be reported on DMR as daily maximum value.
Dissolved oxygen shall be reported on the DMR as a minimum value.
Total Phosphorus shall be reported on the DMR as a daily maximum and monthly average value.
Total Nitrogen shall be reported on the DMR as a daily maximum value.
Chloride shall be reported on the DMR as a daily maximum value.

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (Proposed Plant)

Load limits computed based on a design average flow (DAF) of 4.7 MGD (design maximum flow (DMF) of 12 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$**[1]	392 (1,001)		784 (2,002)	10		20	2 Days/Week	Composite
Suspended Solids[1]	470 (1,201)		941 (2,402)	12		24	2 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						2 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						2 Days/Week	Grab
Chlorine Residual***						0.05	2 Days/Week	Grab
Ammonia Nitrogen: As (N) March.	71 (180)	176 (450)	259 (661)	1.8	4.5	6.6	2 Days/Week	Composite
April -May/Sept.-Oct.	59 (150)	176 (450)	278 (711)	1.5	4.5	7.1	2 Days/Week	Composite
June-August	59 (150)	153 (390)	365 (931)	1.5	3.9	9.3	2 Days/Week	Composite
Nov.-Feb.	129 (330)		235 (600)	3.3		6.0	2 Days/Week	Composite
Total Phosphorus (as P) [2]	39 (100)			1.0			2 Days/Week	Composite
Chloride	Monitor Only						1 Day/Month	Composite
Dissolved Phosphorus	Monitor Only						1 Day/Month	Composite
Total Nitrogen	Monitor Only						1 Day/Month	Composite
Nitrate/Nitrite	Monitor Only						1 Day/Month	Composite
Total Kjeldahl Nitrogen (TKN)	Monitor Only						1 Day/Month	Composite
Alkalinity	Monitor Only						1 Day/Month	Grab
Temperature	Monitor Only						1 Day/Month	Grab

				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	2 Days/Week	Grab
August-February				5.5	4.0	3.5	2 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
***See Special Condition 10.
[1] BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA or U.S. EPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD5 concentration to determine the effluent BOD_5 concentration.

Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.
[2] See Special Conditions 16 and 20.

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Effluent Limitations, Monitoring, and Reporting

FINAL

(Continued on Next Page)
Discharge Number(s) and Name(s): 001 STP Outfall (Proposed Plant) (Continued)

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.
Fecal Coliform shall be reported on the DMR as a daily maximum value.
pH shall be reported on the DMR as minimum and maximum value.
Chlorine Residual shall be reported on DMR as daily maximum value.
Dissolved oxygen shall be reported on the DMR as a minimum value.
Total Phosphorus shall be reported on the DMR as a monthly average and daily maximum value.
Total Nitrogen shall be reported on the DMR as a daily maximum value.
Chloride shall be reported on the DMR as a daily maximum value.

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Effluent, Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 002 North STP Excess Flow Outfall (for flows in excess of 1,100 gpm and not exceeding 1,442 gpm)

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	CONCENTRATION LIMITS (mg/L)			
Parameter	Monthly Average	Weekly Average	Sample Frequency	Sample Type
Total Flow (MG)			Daily When Discharging	Continuous
BOD_5 **	30	45	Daily When Discharging	Grab
Suspended Solids**	30	45	Daily When Discharging	Grab
Fecal Coliform	Daily Maximum Shall not Exceed 400 per 100 mL		Daily When Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Chlorine Residual***	0.75		Daily When Discharging	Grab
Ammonia Nitrogen as (N)****	Monitor Only		Daily When Discharging	Grab
Total Phosphorus (as P)	Monitor Only		Daily When Discharging	Grab
Dissolved Oxygen	Monitor Only		Daily When Discharging	Grab

* An explanation shall be provided in the comment section of the DMR should these facilities be used fow in inlet sewer to the North STP pump station is not exceeding 1,100 gmp. The explanation shall identify the reasons the sewer is at a diminished capacity. Additionally, the Permittee shall comply with the provisions of Special Condition 7.

**BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA or U.S. EPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD5 concentration to determine the effluent BOD_5 concentration.

Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

***See Special Condition 18.

****See Special Condition 19.

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column. The flows at the time that 002 North STP Excess Flow facilities are first utilized shall be reported in the comment section of the DMR in gallons per minute (gpm).

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

Chlorine Residual shall be reported on the DMR as a monthly average concentration.

pH shall be reported on the DMR as a minimum and a maximum.

BOD_5 and Suspended Solids shall be reported on the DMR as a monthly and weekly average concentration.

Ammonia Nitrogen shall be reported on the DMR as a daily maximum value.

Dissolved Oxygen shall be reported on the DMR as a minimum value.(Continued on Next Page)

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Effluent, Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 002 North STP Excess Flow Outfall (for flows in excess of 1,100 gpm and not exceeding 1,442 gpm) (continued)

Total Phosphorus shall be reported on the DMR as a daily maximum value.

All indicated grab samples of effluent for any particular day shall be taken within the initial one hour period of discharge.

There shall be no flow diverted to this facility until flow in the inlet sewer to the north STP pump station exceeds 1100 gpd.

Stored flow shall be bled back for complete treatment as soon as the flow in the inlet sewer to the north STP pump station falls below 1,100 gpm.

There shall be no discharge from outfall 002 unless the north excess flow storage capacity is fully utilized and the flow in the inlet sewer to the north STP pump station exceeds 1,100 gpm.

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Effluent, Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 003 Excess Flow Outfall (flows in excess of 6,944 gpm for existing plant and in excess of 8,333 gpm for the proposed plant)*

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	CONCENTRATION LIMITS (mg/L)			
Parameter	Monthly Average	Weekly Average	Sample Frequency	Sample Type
Total Flow (MG)			Daily When Discharging	Continuous
BOD5 **	30	45	Daily When Discharging	Grab
Suspended Solids**	30	45	Daily When Discharging	Grab
Fecal Coliform	Daily Maximum Shall not Exceed 400 per 100 mL		Daily When Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Chlorine Residual***	0.75		Daily When Discharging	Grab
Ammonia Nitrogen as (N)****	Monitor Only		Daily When Discharging	Grab
Total Phosphorus (as P)	Monitor Only		Daily When Discharging	Grab
Dissolved Oxygen	Monitor Only		Daily When Discharging	Grab

* An explanation shall be provided in the comment section of the DMR should these facilities be used when the main treatment facility is not receiving Design Maximum Flow (DMF). The explanation shall identify the reasons the main facility is at a diminished treatment capacity. Additionally, the Permittee shall comply with the provisions of Special Condition 7.

** BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA and USEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent $CBOD_5$ concentration to determine the effluent BOD_5 concentration.

Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

***See Special Condition 18.

****See Special Condition 19.

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column. The main treatment facility flows at the time that 003 excess flow facilities are first utilized shall be reported in the comment section of the DMR in gallons per minute (gpm).

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

Chlorine Residual shall be reported on the DMR as monthly average concentration.

pH shall be reported on the DMR as a minimum and a maximum.

BOD_5 and Suspended Solids shall be reported on the DMR as a monthly and weekly average concentration.

Ammonia Nitrogen shall be reported on the DMR as a daily maximum value. (Continued on Next Page)

NPDES Permit No. IL0021849

Effluent, Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 003 Excess Flow Outfall (flows in excess of 6,944 gpm for existing plant and in excess of 8,333 gpm for the proposed plant)* (continued)

Dissolved Oxygen shall be reported on the DMR as a minimum value.

Total Phosphorus shall be reported on the DMR as a daily maximum value.

All indicated grab samples of effluent for any particular day shall be taken within the initial one hour period of discharge.

Stored flow shall be bled back for complete treatment as soon as the flow to the facility falls below design maximum flow (DMF).

There shall be no discharge from outfall 003 unless the excess flow clarifier is full and the design maximum follow is being taken through the plant for complete treatment.

NPDES Permit No. IL0021849

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD_5	2 Days/Week and Daily When Outfalls 002 or 003 are Discharging	Composite
Suspended Solids	2 Days/Week and Daily When Outfalls 002 or 003 are Discharging	Composite
Total Phosphorus (as P)	1 Day/Month	Composite
Total Nitrogen	1 Day/Month	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD_5 and Suspended Solids shall be reported on the DMR as a monthly average concentration.

Total Phosphorus and Total Nitrogen shall be reported on the DMR as a maximum value.

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 9. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

SPECIAL CONDITION 10. Fecal Coliform limits for Discharge Number 001 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 11.

A. Publicly Owned Treatment Works (POTW) Pretreatment Program General Provisions

1. The Permittee shall implement and enforce its approved Pretreatment Program which was approved on November 19, 1985 and all approved subsequent modifications thereto. The Permittee shall maintain legal authority adequate to fully implement the Pretreatment Program in compliance with Federal (40 CFR 403), State, and local laws and regulations. All definitions in this section unless specifically otherwise defined in this section, are those definitions listed in 40 CFR 403.3. U.S. EPA Region 5 is the Approval Authority for the administration of pretreatment programs in Illinois. The Permittee shall:

   a. Develop and implement procedures to ensure compliance with the requirements of a pretreatment program as specified in 40 CFR 403.8(f)(2)

   b. Carry out independent inspection and monitoring procedures at least once per year, which will determine whether each significant industrial user (SIU) is in compliance with applicable pretreatment standards;

c. Evaluate whether each SIU needs a slug control plan or other action to control slug discharges. If needed, the SIU slug control plan shall include the items specified in 40 CFR 403.8(f)(2)(vi). For IUs identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional SIUs must be evaluated within 1 year of being designated an SIU;

d. Update its inventory of Industrial Users (IUs) at least annually and as needed to ensure that all SIUs are properly identified, characterized, and categorized;

e. Receive and review self monitoring and other IU reports to determine compliance with all pretreatment standards and requirements, and obtain appropriate remedies for noncompliance by any IU with any pretreatment standard and/or requirement;

f. Investigate instances of noncompliance, collect and analyze samples, and compile other information with sufficient care as to produce evidence admissible in enforcement proceedings, including judicial action;

g. Require development, as necessary, of compliance schedules by each industrial user to meet applicable pretreatment standards; and,

h. Maintain an adequate revenue structure and staffing level for continued operation of the Pretreatment Program.

2. The Permittee shall issue/reissue permits or equivalent control mechanisms to all SIUs prior to expiration of existing permits or prior to commencement of discharge in the case of new discharges. The permits at a minimum shall include the elements listed in 40 CFR § 403.8(f)(1)(iii)(B).

3. The Permittee shall develop, maintain, and enforce, as necessary, local limits to implement the general and specific prohibitions in 40 CFR § 403.5 which prohibit the introduction of any pollutant(s) which cause pass through or interference and the introduction of specific pollutants to the waste treatment system from any source of nondomestic discharge.

4. In addition to the general limitations expressed in Paragraph 3 above, applicable pretreatment standards must be met by all industrial users of the POTW. These limitations include specific standards for certain industrial categories as determined by Section 307(b) and (c) of the Clean Water Act, State limits, or local limits, whichever are more stringent.

5. The USEPA and IEPA individually retain the right to take legal action against any industrial user and/or the POTW for those cases where an industrial user has failed to meet an applicable pretreatment standard by the deadline date regardless of whether or not such failure has resulted in a permit violation.

6. The Permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable it to fulfill its requirements with respect to all IUs discharging to its system.

7. Unless already completed, the Permittee shall within eighteen (18) months of the effective date of this Permit submit to USEPA and IEPA a proposal to modify and update its approved Pretreatment Program to incorporate Federal revisions to the general pretreatment regulations. The proposal shall include all changes to the approved program and the sewer use ordinance which are necessary to incorporate the revisions of the Pretreatment Streamlining Rule (which became effective on November 14, 2005), which are considered required changes, as described in the Pretreatment Streamlining Rule Fact Sheet 2.0: Required changes, available at: http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=3. This includes any necessary revisions to the Permittee's Enforcement Response Plan (ERP).

8. Within twenty-four (24) months from the effective date of this permit, the Permittee shall conduct a technical re-evaluation of its local limitations consistent with U.S. EPA's Local Limits Development Guidance (July 2004), and submit the evaluation and any proposed revisions to its local limits to IEPA and U.S. EPA Region 5 for review and approval. U.S. EPA Region 5 will request Permittee to submit the evaluation and any proposed revisions to its local limits on the spreadsheet found at http://www.epa.gov/region5/water/npdestek/Locallmt.xlx. To demonstrate technical justification for new local industrial user limits or justification for retaining existing limits, the following information must be submitted to U.S. EPA:

a. Total plant flow
b. Domestic/commercial pollutant contributions for pollutants of concern
c. Industrial pollutant contributions and flows
d. Current POTW pollutant loadings, including loadings of conventional pollutants
e. Actual treatment plant removal efficiencies, as a decimal (primary, secondary, across the wastewater treatment plant)
f. Safety factor to be applied
g. Identification of applicable criteria:
    i. NPDES permit conditions

- •Specific NPDES effluent limitations
- •Water-quality criteria
- •Whole effluent toxicity requirements
- •Criteria and other conditions for sludge disposal

ii. Biological process inhibition
- •Nitrification
- •Sludge digester

iii. Collection system problems

h. The Permittee's sludge disposal methods (land application, surface disposal, incineration, landfill)
i. Sludge flow to digester
j. Sludge flow to disposal
k. % solids in sludge to disposal, not as a decimal
l. % solids in sludge to digester, not as a decimal
m. Plant removal efficiencies for conventional pollutants
n. If revised industrial user discharge limits are proposed, the method of allocating available pollutants loads to industrial users
o. A comparison of maximum allowable headworks loadings based on all applicable criteria listed in g, above
p. Pollutants that have caused:
   i. Violations or operational problems at the POTW, including conventional pollutants
   ii. Fires and explosions
   iii. Corrosion
   iv. Flow obstructions
   v. Increased temperature in the sewer system
   vi. Toxic gases, vapors or fumes that caused acute worker health and safety problems
   vii. Toxicity found through Whole Effluent Toxicity testing
   viii. Inhibition
q. Pollutants designated as "monitoring only" in the NPDES permit
r. Supporting data, assumptions, and methodologies used in establishing the information a through q above

9. The Permittee Pretreatment Program has been modified to incorporate a Pretreatment Program Amendment approved by U.S. EPA on November 18, 1999. The amendment became effective on the date of approval and is a fully enforceable provision of your Pretreatment Program.

Modifications of your Pretreatment Program shall be submitted in accordance with 40 CFR § 403.18, which established conditions for substantial and non-substantial modifications. All requests should be sent in electronic format to r5npdes@epa.gov, Attention: NPDES Program Branch.

B. Reporting and Records Requirements

1. The Permittee shall provide an annual report briefly describing the permittee's pretreatment program activities over the previous calendar year. Permittees who operate multiple plants may provide a single report providing all plant-specific reporting requirements are met. Such report shall be submitted no later than April 28 of each year to USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: Water Enforcement & Compliance Assurance Branch, and shall be in the format set forth in IEPA's POTW Pretreatment Report Package which contains information regarding:

   a. An updated listing of the Permittee's significant industrial users, indicating additions and deletions from the previous year, along with brief explanations for deletions. The list shall specify which categorical Pretreatment standards, if any, are applicable to each Industrial User.

   b. A descriptive summary of the compliance activities including numbers of any major enforcement actions, (i.e., administrative orders, penalties, civil actions, etc.), and the outcome of those actions. This includes an assessment of the compliance status of the Permittee's industrial users and the effectiveness of the Permittee's Pretreatment Program in meeting its needs and objectives.

   c. A description of all substantive changes made to the Permittee's Pretreatment Program. Changes which are "substantial modifications" as described in 40 CFR § 403.18(c) must receive prior approval from the USEPA.

   d. Results of sampling and analysis of POTW influent, effluent, and sludge.

e. A summary of the findings from the priority pollutants sampling. As sufficient data becomes available the IEPA may modify this Permit to incorporate additional requirements relating to the evaluation, establishment, and enforcement of local limits for organic pollutants. Any permit modification is subject to formal due process procedures pursuant to State and Federal law and regulation. Upon a determination that an organic pollutant is present that causes interference or pass through, the Permittee shall establish local limits as required by 40 CFR § 403.5(c).

2. The Permittee shall maintain all pretreatment data and records for a minimum of three (3) years. This period shall be extended during the course of unresolved litigation or when requested by the IEPA or the Regional Administrator of USEPA. Records shall be available to USEPA and the IEPA upon request.

3. The Permittee shall establish public participation requirements of 40 CFR 25 in implementation of its Pretreatment Program. The Permittee shall at least annually, publish the names of all IU's which were in significant noncompliance (SNC), as defined by 40 CFR § 403.8(f)(2)(viii), in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the Permittee or based on any more restrictive definition of SNC that the POTW may be using.

4. The Permittee shall provide written notification to the USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: NPDES Programs Branch and to the Deputy Counsel for the Division of Water Pollution Control, IEPA, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 within five (5) days of receiving notice that any Industrial User of its sewage treatment plant is appealing to the Circuit Court any condition imposed by the Permittee in any permit issued to the Industrial User by Permittee. A copy of the Industrial User's appeal and all other pleadings filed by all parties shall be mailed to the Deputy Counsel within five (5) days of the pleadings being filed in Circuit Court.

C. Monitoring Requirements

1. The Permittee shall monitor its influent, effluent and sludge and report concentrations of the following parameters on monitoring report forms provided by the IEPA and include them in its annual report. Samples shall be taken at semi-annual intervals at the indicated reporting limit or better and consist of a 24-hour composite unless otherwise specified below. Sludge samples shall be taken of final sludge and consist of a grab sample reported on a dry weight basis.

STORET CODE	PARAMETER	Minimum reporting limit
01097	Antimony	0.07 mg/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hex) (grab not to exceed 24 hours)*	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab)*(available **** or amenable to chlorination)	5.0 ug/L
00720	Cyanide (total) (grab)	5.0 ug/L
00951	Fluoride*	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)*	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (effluent grab)***	1.0 ng/L**
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)*	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01059	Thallium	0.3 mg/L
01092	Zinc	0.025 mg/L

* Influent and effluent only
**1 ng/L = 1 part per trillion.
***Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E, other approved methods may be used for influent (composite) and sludge.
****USEPA Method OIA – 1617.

Special Conditions

Minimum reporting limits are defined as: (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All samples containers, preservatives, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined including all oxidation states. Where constituents are commonly measured as other than total, the phase is so indicated.

2. The Permittee shall conduct an analysis for the one hundred and ten (110) organic priority pollutants identified in 40 CFR 122 Appendix D, Table II as amended. This monitoring shall be done annually and reported on monitoring report forms provided by the IEPA and shall consist of the following:

    a. The influent and effluent shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. The sampling shall be done during a day when industrial discharges are expected to be occurring at normal to maximum levels.

    Samples for the analysis of acid and base/neutral extractable compounds shall be 24-hour composites.

    Five (5) grab samples shall be collected each monitoring day to be analyzed for volatile organic compounds. A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than one (1) mL of each grab included in the composite.

    Wastewater samples must be handled, prepared, and analyzed by GC/MS in accordance with USEPA Methods 624 and 625 of 40 CFR 136 as amended.

    b. The sludge shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. A sludge sample shall be collected concurrent with a wastewater sample and taken as final sludge.

    Sampling and analysis shall conform to USEPA Methods 624 and 625 unless an alternate method has been approved by IEPA.

    c. Sample collection, preservation and storage shall conform to approved USEPA procedures and requirements.

3. In addition, the Permittee shall monitor any new toxic substances as defined by the Clean Water Act, as amended, following notification by the IEPA or U.S. EPA.

4. Permittee shall report any noncompliance with effluent or water quality standards in accordance with Standard Condition 12(f) of this Permit.

5. Analytical detection limits shall be in accordance with 40 CFR 136. Minimum detection limits for sludge analyses shall be in accordance with 40 CFR 503.

D. Pretreatment Reporting

US EPA Region 5 is the approval Authority for administering the pretreatment program in Illinois. All requests for modification of pretreatment program elements should be submitted in redline/strikeout electronic format and must be sent to US EPA at r5npdes@epa.gov.

Permittee shall upon notice from US EPA, modify any pretreatment program element found to be inconsistent with 40 CFR 403.

SPECIAL CONDITION 12. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled “Fiscal Report Form For NPDES Permittees”.

Special Conditions

SPECIAL CONDITION 13. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:

   a. Fish - 96 hour static LC_{50} Bioassay using fathead minnows (Pimephales promelas).

   b. Invertebrate 48-hour static LC_{50} Bioassay using Ceriodaphnia.

2. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.

3. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.

4. Toxicity - Should a bioassay result in toxicity to >20% of organisms test in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to $\geq$50% of organisms tested in the 100% effluent treatments, the Permittee shall immediately notify IEPA in writing of the test results.

5. Toxicity Reduction Evaluation and Identification - Should the biomonitoring program identify toxicity and result in notification by IEPA, the permittee shall develop a plan for toxicity reduction evaluation and identification. This plan shall be developed and implemented in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days of notification date of the permittee above or other such date as is received by letter from IEPA.

   The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results and toxicity reduction evaluation, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants and additional whole effluent toxicity monitoring to confirm the results of the evaluation. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 14. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for U.S. EPA and IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.
Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by this permit or the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Special Conditions

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 15. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate Water Quality Study.

SPECIAL CONDITION 16.

1. The Permittee shall participate in the DuPage River Salt Creek Workgroup (DRSCW). The Permittee shall work with other watershed members of the DRSCW to determine the most cost effective means to remove dissolved oxygen (DO) and offensive condition impairments in the DRSCW watersheds.

2. The Permittee shall ensure that the following projects and activities set out in the DRSCW Implementation Plan (April 16, 2015), are completed (either by the permittee or through the DRSCW) by the schedule dates set forth below; and that the short term objectives are achieved for each by the time frames identified below:

Project Name	Completion Date	Short Term Objectives	Long Term Objectives
QUAL 2K East Branch and Salt Creek	December 31, 2023	Collect new baseline data and update model	Quantify improvements in watershed. Identify next round of projects for years beyond 2024.
NPS Phosphorus Feasibility Analysis	December 31, 2021	Assess NPS performance from reductions leaf litter and street sweeping	Reduce NPS contributions to lowest practical levels

3. The Permittee shall participate in implementation of a watershed Chloride Reduction Program, either directly or through the DRSCW. The program shall work to decrease DRSCW watershed public agency chloride application rates used for winter road safety, with the objective of decreasing watershed chloride loading. The Permittee shall submit an annual report on the annual implementation of the program identifying the practices deployed, chloride application rates, estimated reductions achieved, analyses of watershed chloride loads, precipitation, air temperature conditions and relative performance compared to a baseline condition. The report shall be provided to the Agency by March 31 of each year reflecting the Chloride Abatement Program performance for the preceding year (example: 2015-16 winter season report shall be submitted no later than March 31, 2017). The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW Permittees.

4. The Permittee shall submit an annual progress report on the projects listed in the table of paragraph 2 above to the Agency by March 31 of each year. The report shall include project implementation progress. The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW Permittees.

5. The Permittee shall develop a written Phosphorus Discharge Optimization Plan. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor low cost facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not necessarily be limited to, an evaluation of the following optimization measures:
   a. WWTF influent reduction measures.

i. Evaluate the phosphorus reduction potential of users.
ii. Determine which sources have the greatest opportunity for reducing phosphorus (e.g., industrial, commercial, institutional, municipal, and others).
1. Determine whether known sources (e.g., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
2. Evaluate implementation of local limits on influent sources of excessive phosphorus.

b. WWTF effluent reduction measures.
i. Reduce phosphorus discharges by optimizing existing treatment processes without causing non-compliance with permit effluent limitations or adversely impacting stream health.
1. Adjust the solids retention time for biological phosphorus removal.
2. Adjust aeration rates to reduce DO and promote biological phosphorus removal.
3. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
4. Minimize impact on recycle streams by improving aeration within holding tanks.
5. Adjust flow through existing basins to enhance biological nutrient removal.
6. Increase volatile fatty acids for biological phosphorus removal.

6. Within 24 months of the effective date of this permit, the Permittee shall finalize the written Phosphorus Discharge Optimization Evaluation Plan and submit it to IEPA. The plan shall include a schedule for implementing all of the evaluated optimization measures that can practically be implemented and include a report that explains the basis for rejecting any measure that was deemed impractical. The schedule for implementing all practical measures shall be no longer than 36 months after the effective date of this permit. The Permittee shall implement the measures set forth in the Phosphorus Discharge Optimization Plan in accordance with the schedule set forth in that Plan. The Permittee shall modify the Plan to address any comments that it receives from IEPA and shall implement the modified plan in accordance with the schedule therein.

   Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 24 months from the effective date of the permit.

7. The Permittee shall, within 24 months of the effective date of this permit, complete a feasibility study that evaluates the timeframe, and construction and O & M costs of reducing phosphorus levels in its discharge to a level consistently meeting a limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L utilizing a range of treatment technologies including, but not necessarily limited to, biological phosphorus removal, chemical precipitation, or a combination of the two. The study shall evaluate the construction and O & M costs of the different treatment technologies for these limits on a monthly, seasonal, and annual average basis. For each technology and each phosphorus discharge level evaluated, the study shall also evaluate the amount by which the Permittee's typical household annual sewer rates would increase if the Permittee constructed and operated the specific type of technology to achieve the specific phosphorus discharge level. Within 24 months of the effective date of this Permit, the Permittee shall submit to the Agency and the DRSCW a written report summarizing the results of the study.

8. Total phosphorus in the effluent shall be limited as follows:
   a. The effluent limitation shall be 1.0 mg/L monthly average for 11 years in accordance with the schedule in Special Condition 20 of this permit unless the Agency approves and reissues or modifies the permit to include an alternative phosphorus reduction pursuant to paragraph b or c below that is fully implemented within 11 years of the effective date of this permit.
   b. The Agency may modify this permit if the DRSCW has developed and implemented a trading program for POTWs in the DRSCW watersheds, providing for reallocation of allowed phosphorus loadings between two or more POTWs in the DRSCW watersheds, that delivers the same results of overall watershed phosphorus point-source reduction and loading anticipated from the uniform application of the applicable 1.0 mg/L monthly average effluent limitation among the POTW permits in the DRSCW watersheds and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.
   c. The Agency may modify this permit if the DRSCW has demonstrated and implemented an alternate means of reducing watershed phosphorus loading to a comparable result within the timeframe of the schedule of this condition and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.

9. The Permittee shall monitor the wastewater effluent, consistent with the monitoring requirements on Page 2 of this permit, for total phosphorus, dissolved phosphorus, nitrate/nitrite, total Kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated), alkalinity and temperature at least once a month. The Permittee shall monitor the wastewater influent for total phosphorus and total nitrogen at least once a month. The results shall be submitted on NetDMRs to the Agency unless otherwise specified by the Agency.

Special Conditions

10. The Permittee shall submit a Nutrient Implementation Plan (NIP) for the DRSCW watersheds that identifies phosphorus input reductions by point source discharges, non-point source discharges and other measures necessary to remove DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203. The NIP shall also include a schedule for implementation of the phosphorus input reductions and other measures. The Permittee may work cooperatively with the DRSCW to prepare a single NIP that is common among DRSCW permittees. The NIP shall be submitted to the Agency by December 31, 2023.

SPECIAL CONDITION 17. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by this Permit and by Ill. Adm. Code 306.304. In order to accomplish these goals of complying with this prohibition and mitigating the adverse impacts of any such overflows if they do occur, the Permittee shall (A) identify and report to IEPA all SSOs that do occur, and (B) develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly. The permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they were designed.

A. Measures and Activities:

1. A complete map and system inventory for the collection system owned and operated by the Permittee;
2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
3. Documentation of unplanned maintenance;
4. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow monitoring as necessary;
5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee;
6. Operational control, including documented system control procedures, scheduled inspections and testing;
7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset Management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and
8. Asset Management shall include but is not limited to the following elements:
    a. Asset Inventory and State of the Asset;
    b. Level of Service;
    c. Critical Asset Identification;
    d. Life Cycle Cost; and
    e. Long-Term Funding Strategy.

B. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and
3. Maintain a summary of CMOM activities.

C. Overflow Response Plan:

1. Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;
2. Respond to each overflow or back-up to determine additional actions such as clean up; and
3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.

D. System Evaluation Plan:

1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
2. Evaluate plans to reduce I/I and eliminate SSOs;
3. Special provisions for Pump Stations and force mains and other unique system components; and

4. Construction plans and schedules for correction.

E. Reporting and Monitoring Requirements:

1. Program for SSO detection and reporting; and
2. Program for tracking and reporting basement back-ups, including general public complaints.

F. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
3. Identifies who shall receive the notification;
4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
5. Includes a description of the lines of communication; and
6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses. http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf and http://water.epa.gov/type/watersheds/wastewater/upload/guide_smallsystems_assetmanagement_bestpratices.pdf

SPECIAL CONDITION 18. For Discharge Nos. 002 and 003, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.75 mg/L (monthly average) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMRs on a monthly basis.

SPECIAL CONDITION 19. The Agency shall consider all monitoring data submitted by the discharger in accordance with the monitoring requirements of this permit for all parameters, including but not limited to data pertaining to ammonia and dissolved oxygen for discharges from Discharge Numbers 002 and 003, to determine whether the discharges are at levels which cause, have the reasonable potential to cause or contribute to exceedances of water quality standards; and, if so, to develop appropriate water quality based effluent limitations. If the discharger wants the Agency to consider mixing when determining the need for and establishment of water quality based effluent limitations, the discharger shall submit a study plan on mixing to the Agency for the Agency's review and comment within two (2) months of the effective date of this Permit.

SPECIAL CONDITION 20. The Total phosphorus (as P) concentration limit of 1.0 mg/L (Monthly Average) and associated load limits on page 2 of this Permit shall become effective three and one-half (3 ½) years from the effective date of this Permit.

In order for the Permittee to achieve the above limit, it will be necessary to modify existing treatment facilities to include phosphorus removal, reduce phosphorus sources or explore other ways to prevent discharges that exceed the limit. The Permittee must implement the following compliance measures consistent with the schedule below:

A. Interim Report on Phosphorus Removal Feasibility Report and Optimization Plan	6 months from effective date of permit
B. Interim Report on Phosphorus Removal Feasibility Report and Optimization Plan	12 months from effective date of permit
C. Interim Report on Phosphorus Removal Feasibility Report and Optimization Plan	18 months from effective date of permit
D. Phosphorus Removal Feasibility Report and Optimization Plan Submitted	24 months from effective date of permit
E. Plans and Specifications Submitted	30 months from effective date of permit
F. Progress Report on Construction	36 months from effective date of permit
G. Achieve Concentration and Loading Effluent Limitations for Total Phosphorus	42 months from effective date of permit

The Permit may be modified, with Public Notice, to include revised compliance dates.

Special Conditions

REPORTING

The Permittee shall submit a report no later than fourteen (14) days following the completion dates indicated for each lettered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed, the reasons for non-completion and the anticipated completion date.